





Our Products and Services

- Calibration Laboratory (Accredited ISO/IEC 17025)
- · Measuring Test Equipment Trading
- Equipment Repairing
- · Equipment Rental and Leasing
- ISO Training and Consulting
- One Stop Service for Measuring Test Equipment

NA Caltechnologies Co., Ltd.

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Company Profile











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ISO/IEC 17025 Accreditation Calibration Laboratory



















1. History & Overview

Year 1972 NEC Corporation Japan Ltd. has been established a calibration

company at Yokohama City to support calibration of measuring

instrument for NEC Group of Company in Japan.

Year 1982 First on-site calibration in oversea was executed to NEC Malaysia Group

of Company.

Year 1983 Calibration business was grown satisfactory, then NEC Corporation

Japan Ltd. separated calibration business into a new company under the name NEC Factory Engineering Japan Ltd. for operation calibration laboratory and trading for measuring instrument. NEC calibration was

number one calibration laboratory in Japan.

Year 1993 NEC Factory Engineering Japan Ltd. was certified ISO 9000 from Japan

Quality Assurance Organization (JQA).

Year 1995 NEC Factory Engineering Japan Ltd. established a branch of calibration

laboratory at Tohoku City to support customers located in the north area

in Japan.

Year 1999 NEC Factory Engineering Japan Ltd. established a first oversea branch

of calibration in Thailand under the name NEC Communication Systems (Thailand) Co., Ltd. at Navanakorn Industrial Estate, Pathumthani

province to support NEC Group of Company, affiliates, and other

customers.

Year 2001 The calibration laboratory of NEC Communication Systems (Thailand)

Co., Ltd. was certified the ISO 9001 from Japan Quality Assurance Organization (JQA). The ISO 9001 certification for calibration did not prove the competence of calibration laboratory and not meet the requirements from the customers. Therefore, the calibration laboratory

implemented the ISO/IEC Guide 25 accreditation in the same year.

Year 2002 The calibration laboratory of NEC Communication Systems (Thailand)

Co., Ltd. was accredited the ISO/IEC Guide 25 from Thai Industrial Standards Institute (TISI), Ministry of Industry for calibration scope of

Dimension Instrument Calibration (Accreditation no. 0022).

Year 2003 The ISO/IEC Guide 25 was obsoleted and updated the new version to

be ISO/IEC 17025: 1999. Therefore, the laboratory updated the

management system to this standard and accredited the ISO/IEC 17025:

1999 in this year with expansion more scopes of accreditation for

Dimension and Electrical Instrument Calibration.

Year 2006 NEC Communication Systems (Thailand) Co., Ltd. was merged

business with NEC Thailand Co., Ltd. under the new name as NEC Corporation (Thailand) Ltd. Therefore, Calibration Business was a

business unit of NEC Corporation (Thailand) Ltd.









Year 2007

The ISO/IEC 17025: 1999 was obsoleted and updated the new version to be ISO/IEC 17025: 2005. Therefore, the laboratory has updated the management system to this standard and accredited the ISO/IEC 17025: 2005 in this year with expansion more scopes of accreditation for Dimension, Electrical and Temperature Instrument Calibration.

Year 2008

The laboratory has grown up and have more employees. The management of laboratory decided to move the laboratory out from Navanakorn Industrial Estate to MMC Factory, Pathumthani province, near Navanakorn.

Year 2008

The laboratory applied addition scopes of accreditation for Dimension, Mechnical, Temperature, Electrical, RF and Microwave Instrument Calibration to TISI. We got the accreditation for these parameters in this year (Accreditation no. 0132).

Year 2012

The laboratory applied addition scopes of accreditation for Hand Torque Tools, Oscilloscope, and On-site Calibration for Electrical Instrument Calibration to TISI. We got the accreditation for these parameters in this year.

Year 2015

NEC Japan has formulated a new brand statement, "Orchestrating a brighter world" along with seven themes to represent approach to social value creation. With a firm eye on the future and an intuitive understanding of how the world, society, and technologies are changing, NEC Japan committed to creating new value for customers, partners, and the global community as a whole by discovering and solving the true issues faced by society, thereby achieving our goal of making the world a brighter place.

Under the brand statement, "Orchestrating a brighter world", NEC Group is focusing on Solutions for Society businesses that utilize the strengths of ICT to create the social value of safety, security, efficiency and equality that is necessary for people to live more prosperous lives. Therefore, from this vision of NEC Group, calibration and measuring instrument were not core business of NEC Corporation (Thailand) Ltd.

Year 2016

NEC Corporation (Thailand) Ltd. has transferred calibration and measuring instrument business to **NA Caltechnologies Co., Ltd.**, which are a partner and supply-chain vendor of NEC Corporation (Thailand) Ltd.

This transfer of business inclues transferring of calibration assets, calibration equipment, personnel, the right to lease laobratory building, the right for continuing of ISO/IEC 17025 certificate, documents of management system, calibration technique and technologies, logistic system, trading for measuring instrument, and customer data-base.

NA Caltechnologies Co., Ltd. is the new company name only, but everything under management system is the same, such as personnel, calibration equipment, laboratory infrastructure, pick-up and delivery services, organization, etc. Also, we are still supported by Japanese expat specialist from NEC Management Partner (Japan) Ltd.











2. Company Profile & Vision

NA Caltechnologies Co., Ltd. is the new company name but we have the expert and specialist personnel with 17 years experience in calibration business in Thailand with former named of NEC. We are ready to provide quality calibration services with advanced calibration technology and reference standard equipment with proven traceability. Our calibration services will strongly support your quality control processes by ensuring the accuracy of your measuring instruments and equipment.

At the present, we are accredited the ISO/IEC 17025 by The Office of the National Standardization Council (ONSC), Thai Industrial Standards Institute (TISI), Ministry of Industry Thailand. The accreditation no. is Calibration No. 0289.

Company Name	NA Caltechnologies Co., Ltd.			
Head Office	75/107 Moo 11, Phaholyothin Rd., Klongnueng, Klongluang, Pathumthani 12120 Thailand. Tel +66(0)-2529-2460 (Auto) Fax +66(0)-2529-2133, 529-2466			
URL	http://www.nacal.co.th (Und	http://www.nacal.co.th (Under construction)		
Center Email	sales-cal@nacal.co.th	sales-cal@nacal.co.th		
Established	June 15, 2016			
Representative	Authorized Directors	Mr. Naphong Chongtrakul		
Directors		Mr. Yanyong Pithong		
Capital	5,000,000 Thai Baht			
Major Business	 Calibration Laboratory Trading for Measuring Test Equipment Trading for Industrial Products and Machines Robotics and System Integrations 			
Employees	73 (As of May, 2018)			
Quality System	ISO/IEC 17025			
Management Person	Japanese Expat Specialis	t		
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	Representative Director			
	Mr. Naphong Chongtrakul	Mr. Naphong Chongtrakul naphongc@nacal.co.th		
	Head of Calibration Division			
	Head of Calibration Divisi	on		
	Head of Calibration Divisi Mr. Yanyong Pithong	on yanyongp@nacal.co.th		
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Trading)	(3) Mr. Sompong Jullapho	sompongj@nacal.co.th		
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	(5) mor contains morrador	223.73		

NA Vision

Under the long experience with calibration business in Thailand, NA Caltechnologies Co., Ltd. will be number one private calibration laboratory in Thailand within next 5 years from now on. We will expand the range of calibration parameters in every years, such as Illumination, Sound Level, Vibration, Flow Rate, Volumetric, Chemical, and others to support the growth of domestic industry and ASEAN countries. Also, we will be one stop service firm for calibration, measuring test equipment, and other industrial products.











Business Segment

3.1 **Calibration Laboratory**

Introduction

NA Caltechnologies Co., Ltd. is one of the best calibration laboratories in Thailand. We provide full service calibration laboratory and repairing of measuring test equipment with advanced technology and the highest class reference standard proven traceability. Our calibration services can strongly support your quality control process by ensuring the accuracy of your measuring test instrument.



Reference Standard Equipment with Traceability

Calibration equipment and reference standards have been calibrated and provided traceability to National Standard. Also the standard values with the smallest uncertainty are ready for calibrating to your measuring test instrument with the best uncertainty compliance with the ISO standard. We have highly standard accuracy equipment for all calibration parameters.



Advanced Calibration Technology with Accumulate Know-hows

Our laboratory uses high technology for calibration with the newest model of calibration equipment and reference standards, also with calibration software developed by ourself to make confidence, quick and accuracy of calibration results and measurement uncertainty.





Wide-Range Calibration Coverage

Our calibration services cover the widerange of calibration parameters, such as Electrical, RF Microwave, Optical Signal, Broadcasting Equipment, Telecommunication Signal Source and Analyzer, Dimension, Mechanical, Temperature, Humidity, Volumetric, Chemical, etc.













Electrical, DC, Low Frequency Calibration Laboratory

This laboratory environment conditions are controlled with temperature (23±3)°C, relative humidity (55±15)%rh, ACV line power (100V/220V ±10%). The calibration scopes for this laboratory are Calibrator, Multimeter, Power Meter, Electrical Source, Calibrator, LCR Meter, Resistance, Capacitance, Inductance, Insulation, Impedance, Phase, High Voltage Meter and Source, Withstanding Tester, Tachometer, Stopwatch, Low Frequency Meter and Source, Water Quality Meter, etc.



RF, Microwave, Optical, Frequency Calibration Laboratory

This laboratory environment conditions are controlled with temperature (23±3)°C, relative humidity (55±15)%rh, ACV line power (100V/220V ±10%). The calibration scopes for this laboratory are Signal Generator, Oscilloscope, Audio Analyzer, Time & Frequency Counter, RF Microwave, Network Analyzer, Spectrum Analyzer, Signal Analyzer, Optical Fibre Optic Meter and Source, Digital TV Broadcasting Equipment, Frequency Measuring and Source, Laser Power Meter and Source, etc.





Temperature, Humidity Calibration Laboratory

This laboratory environment conditions are controlled with temperature (23±3) °C. relative humidity (55±15) %rh, ACV line power (100V/220V ±10%). The calibration scopes for this laboratory are RTD/PRT/Thermistor Thermometer, Thermocouple Thermometer, Liquid-in-glass Thermometer, Transmitter Thermometer, Humidity Meter, Humidity Transmitter, Temperature Bath, Temperature Block, Furnace, Chamber, Oven, Freezer, Temperature Indicator and Simulator, Infrared Thermometer, etc.









Calibration temperature capability is 1200°C.



etc.

NA Caltechnologies Co., Ltd.









Acoustic, Vibration, Environment, Radiation, Calibration Laboratory

are controlled with temperature (23±3) °C, relative humidity (55±15) %rh, ACV line power (100V/220V ±10%).
The calibration scopes for this laboratory are Sound Level Meter, Vibration Meter and Source, Illumination Meter, UV Meter, Gloss Meter and Sample, Tesla and Gauss Meter, Air Velocity Meter, Color/Chroma Meter,

This laboratory environment conditions





Chemical, Volumetric Calibration Laboratory

This laboratory environment conditions are controlled with temperature (22±2) °C, relative humidity (55±15) %rh, ACV line power (100V/220V ±10%).

The calibration scopes for this laboratory are Viscosity Meter, pH Meter, Conductivity Meter, TDS/OPR Meter, Salinity/Refractometer, Hydrometer, Spectrophotometer, Volumetric Apparatus, Liquid Particle Counter, etc.





Gauge Block Calibration Laboratory

This laboratory environment conditions are controlled with temperature (20±0.5)°C relative humidity (55±15)%rh, ACV line power (100V/220V ±10%).

The calibration scopes for this laboratory are Gauge Block Grade 0, 1, 2 (Steel, Ceramic, and Carbide), Caliper Checker, Depth Micro-Checker, Height Master, High Precision Gauge, Long Gauge Block, etc.













Dimensional, Small Tool Calibration Laboratory

This laboratory environment conditions are controlled with temperature (20±1)°C relative humidity (55±15)%rh, ACV line power (100V/220V ±10%). The calibration scopes for this laboratory are Ring Gauge, Plug Gauge, Pin Gauge, Thread Ring Gauge, Thread Plug Gauge, Micrometer, Caliper, Height Gauge, Depth Gauge, Feeler Gauge, Thickness Gauge, Dial Indicator, Dial Test Indicator, Bore Gauge, Angle, Inclinometer, etc.



Also, our laboratory has Digital Microscope and High Extension Camera with Linear Scale Machine to support calibration of Metal Rule, Steel Tape, Textile Tape, Glass Scale, Taper Gauge, Pitch Gauge, Radius Gauge, Jig&Fixture, etc.

Furthermore, we provide on-site calibration for Profile Projector, Microscope, CMM, and other scopes of calibration depends the customer requirements.



Mass Calibration Laboratory

This laboratory environment conditions are controlled with temperature (22±2)°C relative humidity (55±15)%rh, ACV line power (100V/220V ±10%). The calibration scopes for this laboratory are Weight Class OIML F1, F2, M1, M2, M3, Electronic and Spring Balance, Weighing of Mass, etc.







Mechanical Calibration Laboratory

This laboratory environment conditions are controlled with temperature (22±2)°C relative humidity (55±15)%rh, ACV line power (100V/220V ±10%). The calibration scopes for this laboratory are Torque Tools, Torque Meter, Pressure Gauge, Force Instrument, Hardness Testing Machine, Durometer, Surface Roughness Tester, Tensile Testing Machine, Flow Meter, etc.



















On-site Calibration Service

To save time and money, on-site service is the best solution of requirement.

- Provide customer with thorough calibration to the highest quality that protects customer instruments and measurement confidence.
- Reduce cost of transport, time, accommodation, saving significantly more than the cost of the service.
- Give users confidence that their instrument will be returned quickly, boosting booth morale and productivity.
- All kind of instruments can be on-site calibrated









ISO/IEC 17025 Accreditation

Our laboratory has continued implementation and accredited the management system of ISO/IEC 17025 for many scopes of the calibration (Electrical, RF Microwave, Temperature, Humidity, Dimension, Mechanical, and On-site Calibration). We have accredited since year 2001.

Now, we are accredited ISO/IEC 17025 from 2 accredited bodies (ONSC and ANAB) for many scopes of calibration, such as, acoustic, vibration, radiation, environment, illumination, air velocity, chemical, thermodynamics, time, frequency, fiber optic, laser power, RF microwave, electrical dc and low frequency, dimensional, mechanical, flow, etc.

The accredited scopes by both bodies cover both in-house and on-site calibration of the most scopes in Thailand.

We are ready to provide calibration service in ASEAN countries.

Now, we are accredited by the National Standardization Council – Office of the National Standardization Council of Thailand (NSC – ONSC)





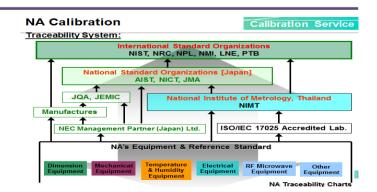
Now, we are accredited by the ANSI-ASQ National Accreditation Board (ANAB), U.S.A.





Traceability

Our calibration equipment and reference standard have been calibrated and traceable to the International of System Unit (SI Unit) maintains at National Institute of Metrology, Thailand (NIMT) and/or other associated foreign national standards.













Repairing Service for Measuring Test Instrument

We have had repairing scope since year 2006. Our engineer teams have repairing experienced for many years in the field of telecommunication, satellite mobile vehicle and electronic device repair services.

Our teams provide the expertise to consult, design and implementation of telecommunication. We further support our products and service through the engineering support.

Our teams is highly trained and experienced enable to provide diagnosis, troubleshooting and repair the most major brand of electric equipment, measurement, analyzer, instrument, radio equipment and tester. Repair capability cover component & part level at affordable price and also cooperate with our calibration service that is the one stop service here.







Customers will get warranty period in 90 (ninety) days from the date of shipment back to the customers. If the failure is the same fault under normal conditions, we pleased to re-fix the instrument.

If our evaluation finds the failure to be fault from defect in workmanship and materials, we will gladly repair your item again with no charge.

Pick-up and Delivery Services

Our laboratory provides pick-up and delivery service to your measuring test instrument for calibration, repairing, and sub-contracting. We design and fix route for logistic management at the main industrial estate zone of Thailand with our 6-7 cars per day. You do not need to send your equipment yourself. You just call us for confirmation the date of pick-up and delivery.













Trading for Measuring Test Equipment

We provide test equipment including network equipment for Sale, Lease or Rent. We have new and refurbished equipment with warranty as your requirements. We coordinate with local and oversea manufacturers and authorized dealers for the big brands.

Also, we buy pre-owned test, un-sued equipment and offer asset management services to market your used surplus equipment worldwide. Trade in programs are available to help reduce your test equipment costs.

Wireless, broadband, electrical, IT, networking, avionics, IP phones, routers, switches, general purpose, bench top or hand held. Huge inventory with global sales support. Ask about our test equipment leasing program. Sell your surplus test equipment to us. Use our Consignment Program to maximize the value of your test assets. We also repair, recondition and calibrate the largest selection of test equipment globally.



- Bore Guage
- Depth Guage
- Dial Indicator
- ·Guage Block
- Micrometer
- Thickness Guage





Force:

- Digital Force Guage
- Digital Push Pull Guage
- •Mechanical Force Guage
- •Manual Test Stand
- Tension Guage
- ·etc.



- · Adjustable Torque Wrench
- Digital Torque Screwdriver
- Digital Torque Meter
- Screw Cap Tester
- Torque Wrench Calibrator
- Torque Guage





Weight:

- Analytical Balance
- Counting Scale
- Industrial Balance
- Precision Balance



Electrical:

- · Analog Multimeter
- ·Clamp Meter
- ·Electrostatic Field Meter
- ·Hipot & Insulation Tester
- ·Leakage Current Tester
- Calibrator

·etc.









Telecommunication:

- Function Generator
- ·Signal Generator
- ·Lan & Telecommunication testing
- ·Lan Tester
- Network Analyzer
- ·etc.

















Environment: • Air Veloity Meter • Dust Monitor • Particle Counter • Refrigerant Leak Detector • Sound Level Meter • Thermo-Hygrograph • Vibration Meter • etc.

Material Analyzer:

·Coating Thickness tester

- Duometer
- ·Gloss Meter
- •Luminance Meter
- ·Sharp Edge Tester
- Spectrophotometer

•etc.





The following big brands or manufacturers are example of our selling.

Electrical, Temperature, Humidity Test Equipment;



EDS Control Equipment;



Dimension and Mechanical Test Equipment;



Vibration Test Equipment;













3.3 Robotics and System Integration

NA Caltechnologies Co., Ltd. is an authorized dealer from "YASKAWA" who is providing the technology to help manufacturers improve production reliability and productivity through automated control of products and process. Yaskawa has grown to become a leading supplier of AC and DC servos, AC inverter and FA Controllers, Robotics products in South East Asia region.

Main Products

- Robot
 - Arc Welding
 - Spot Welding
 - Handling
 - Picking / Packing / Palletizing
 - Assembly & Distributing
 - Painting
 - Laser Welding / Laser Cutting
- System Integration
- Mechatronics
 - AC Drives
 - AC Servo Drive
 - Controllers

Example of Products





For this business segment, please contact

Khun Anan Tangsunan

Tel. 061-996-5459

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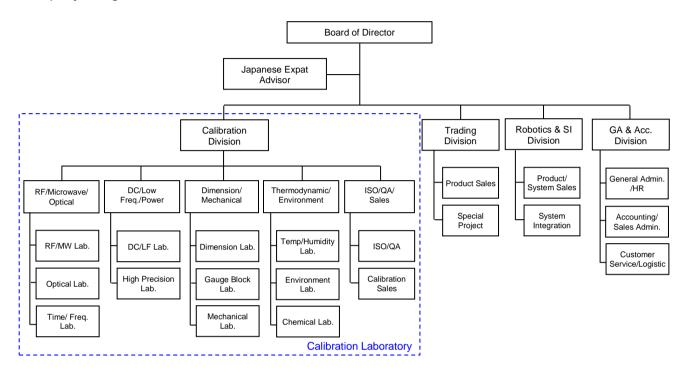




4. Organization Chart

NA Caltechnologies Co., Ltd. has organization chart as below.

Company's Organization



Number of employee for each Business Unit and Department shows as below.

1.	Japanese Expat Specialist	1	Person(s)
2.	Head of Division (BU)	4	Person(s)

- 3. Calibration Division
 - 3.1 Electrical & Temperature Calibration Laboratory

_	Calibration Manager	1	Person(s)
_	Electrical/ DC/ Low Frequency	7	Person(s)
_	RF/ Microwave/ Optical	7	Person(s)

3.2 Temperature & Humidity & Environment Calibration Laboratory

- Calibration Manager 1 Person(s)

	Calibration Managor	•	1 010011(0)
_	Temperature/ Humidity	5	Person(s)
_	Acoustic/ Vibration/ Environment	2	Person(s)
_	Chemical	1	Person(s)

3.3 Dimension Calibration Laboratory

_	Calibration Manager	1	Person(s)
_	Dimension	5	Person(s)

3.4 Mechanical Calibration Laboratory

Mechanical Calibration Laboratory		
 Calibration Manager 	1	Person(s)
 Mechanical 	3	Person(s)

- 3.5 ISO & QA Department 3 Person(s) 3.6 Calibration Sales 8 Person(s)
- 4. Trading Division4.1 Business Development3 Person(s)













5.	5.1 Business Development	3	Person(s)
6.	General Administration & Accounting Division	0	D (a)
	6.1 General Admin. and HR	3	Person(s)
	6.2 Accounting and Sales Admin.	3	Person(s)
	6.3 Customer Service	3	Head-Count
	6.4 Logistic	8	Person(s)

Total Head-Count 73 Person(s)

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